

Accordingly, entry of the present Amendment and Remarks, and favorable consideration, are respectfully solicited, pursuant to 37 C.F.R. §1.116.

Claims 1 through 9 are pending in this application of which claim 8 has been allowed and claims 2, 4 and 7 indicated allowable. Claims 1, 2, 4, 6 and 7 have been amended. Care has been exercised to avoid the introduction of new matter. Indeed, claims 2, 4 and 7 have merely been placed in independent form. Claims 1 and 6 have been amended consistent with the written description of the specification noting Applicants' prerogative to narrow the scope of originally disclosed invention. *In re Johnson*, 558 F.2d 1008, 194 USPQ 187 (CCPA 1977); *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976). Applicants submit that the present Amendment does not generate any new matter issue.

A clean copy of amended claims 1, 2, 4, 6 and 7 appear in the Appendix hereto.

As to the first enumerated paragraph 2 of the November 15, 2002 Office Action, Applicants will submit formal drawings in due course. MPEP§60802 (x).

Claims 5 and 9 were rejected under the second paragraph of 35 U.S.C. §112.

In the statement of the rejection, the Examiner again questioned the expression "effective area." This rejection is traversed as legally erroneous.

Appellants can not overemphasize that the Examiner is charged with the **initial burden** of establishing a *prima facie* basis to deny patentability to a claimed invention under any statutory provisions. *In re Mayne*, 104 F.3d 1339, 41 USPQ2d 1451 (Fed. Cir. 1997); *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 223

USPQ 785 (Fed. Cir. 1984). The Examiner has simply failed to discharge that burden and would improperly deny Applicants **due process of law** by repeatedly compelling Applicants to prove that the claims do not run afoul of the second paragraph of 35 U.S.C. §112 before the Examiner has made a *prima facie* case. The Examiner's statement of the rejection completely ignores the fact that the disclosure is directed to one having ordinary skill in the art. *In re Howarth*, 654 F.2d 103, 210 USPQ2d 689 (CCPA 1981).

As argued in the September 3, 2002 response, indefiniteness under the second paragraph of 35 U.S.C. §112 is a **question of law**, not form. *Personalized Media Communications LLC v. U.S. International Trade Commission*, 161 F.3d 696, 48 USPQ2d 1880 (Fed. Cir. 1998); *Tillotson, Ltd v. Wlaboro Corp.*, 831 F.2d 1033, 4 USPQ2d 1450 (Fed. Cir. 1987); *Orthokinetics Inc. v. Safety Travel Chairs Inc.*, 806 F.2d 1565, 1 USPQ2d 1081 (Fed. Cir. 1986). Accordingly, in rejecting a claim under the second paragraph of 35 U.S.C. §112, the Examiner **must**, repeat **must**, provide a basis and fact and/or cogent technical reasoning to support the **ultimate legal conclusion** that one having ordinary skill in the art, with the supporting specification in hand, would not be able to reasonably ascertain the scope of protection defined by a claim. *In re Okuzawa*, 537 F.2d 545, 190 USPQ 464 (CCPA 1976). Again, **reasonable precision** in light of the particular subject matter involved is all that is required by the second paragraph of 35 U.S.C. §112. *Zoltek Corp. v. United States, supra*; *Miles Laboratories, Inc. v. Shandon, Inc.*, 997 F.2d 870, 27 USPQ2d 1123 (Fed. Cir. 1993); *North American Vaccine, Inc., v. American Cyanamid Co.*, 7 F.3d 1571, 28 USPA2d 1333 (Fed. Cir. 1993); *U.S. v. Teletronics Inc., supra*; *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231USPQ (Fed. Cir. 1986). Applicants again stress that claims must be interpreted through the eyes of **one having ordinary skill in the**

art would in light of and consistent with the written description of the supporting specification.

Zoltek Corp. v. United States, supra; Miles Laboratories, Inc. v. Shandon, Inc. supra.

In applying the above legal tenets to the exigencies of the case, Applicants again submit that the Examiner did **not** discharge the initial burden of establishing a *prima facie* basis to deny patentability to the claimed invention under the second paragraph of 35 U.S.C. §112. **The Examiner must do something more than question the meaning of the art-recognized term "effective area."** The Examiner has **not** factually established that one having ordinary skill in the art would have been confused as to the scope of the claimed invention. In short, the Examiner has not established a *prima facie* basis to deny patentability to the claimed invention under the second paragraph of 35 U.S.C. §112.

Furthermore, appended to the September 3, 2002 response as Exhibit A is an excerpt from a publication entitled "NONLINEAR FIBER OPTICS" by Agrawal, Academic Press, Inc., 1989, wherein at page 20, formula 2.3.29, "effective area" is defined. One having ordinary skill in the art would understand that "effective area" is an optical characteristic and can not be depicted on the drawing.

Not that Applicants are obliged to even offer a rebuttal in the absence of a *prima facie* case, in order to expedite the prosecution and reduce the number of issues, Applicants submit herewith as Exhibit A a publication by the International Telecommunication Union containing a definition of "effective area," as that term would have been understood by one having ordinary skill in the art. The repeated use of the term "effective area", as evidenced by Exhibit A hereto and Exhibit A to the September 3, 2002, response, compel the conclusion that one having ordinary skill in the art would not be confused by the expression "effective area" as employed in

claims 5 and 9. Rather, one having ordinary skill in the art would clearly understand the meaning of the term "effective area" as employed in claims 5 and 9.

Based upon the foregoing, it should be apparent that the Examiner has not established a *prima facie* basis to deny patentability to claims 5 and 9 under the second paragraph of 35 U.S.C. §112. Moreover, there is now an abundance of hard evidence of record to support the conclusion that one having ordinary skill in the art would understand the meaning of the term "effective area" as employed in claims 5 and 9. Under such circumstances, Applicants submit that the imposed rejection of claims 5 and 9 under the second paragraph of 35 U.S.C. §103 is not legally viable and, hence, solicit withdrawal thereof.

Claims 1 and 3 were rejected under 35 U.S.C. §102 for lack of novelty as evidenced by Kinoshita.

In the statement of the rejection, the Examiner again referred to Fig. 6 asserting the disclosure of a Raman amplifier identically corresponding to that claimed. This rejection is traversed.

The factual determination of lack of novelty under 35 U.S.C. §102 requires the identical disclosure in a single reference of each element of a claimed invention, such that the identically claimed invention is placed into the recognized possession of one having ordinary skill in the art.

Crown Operations International Ltd v. Solutia, Inc., 208 F.3d 1339, 62 USPQ2d 1917 (Fed. Cir. 2002); Helifix Ltd. v. Blok-Lok, Ltd. 208 F.3d 1339, 54 USPQ2d 1299 (Fed. Cir. 2000); Electro Medical Systems S.A. v. Cooper Life Sciences, Inc., 34 F.3d 1048, 32 USPQ2d 1017 (Fed. Cir. 1994). There is a fundamental and significant difference between the claimed invention and

Kinoshita's amplifier that scotches the factual determination that Kinoshita identically describes the claimed invention within the meaning of 35 U.S.C. §102.

As argued in the September 3, 2002 response, according to Fig. 6 of Kinoshita relied upon by the Examiner, and the related discussion thereof in the text, as at column 21, lines 41 et seq., the pump light has a wavelength within the 1.47 μ m band (1.45 to 1.49 μ m). This band does not fall within the amplification wavelength band of an EDFA. See, for example, page 8 of the written description of the specification, lines 4 through 12.

In the paragraph bridging pages 5 and 6 of the November 15, 2002 Office Action, the Examiner asserted that claim 1 does not recite the wavelength of the pump light. In response, the pump light has been inserted into claim 1, thereby clearly distinguishing over Kinoshita et al.

The above argued functionally significant difference between the claimed amplifier and Kinoshita's amplifier undermines the factual determination that Kinoshita identically describes the claimed invention within the meaning of 35 U.S.C. §102. *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992); *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986). Applicants, therefore, submit that the imposed rejection of claims 1 and 3 under 35 U.S.C. §102 for lack of novelty as evidenced by Kinoshita is not factually viable and, hence, solicit withdrawal thereof.

Claim 6 was rejected under 35 U.S.C. §102 for lack of novelty as evidenced by Akasaka et al.

In the statement of the rejection, the Examiner referred to Fig. 1 of Akasaka et al. asserting the disclosure of an optical transmission system identically corresponding to that claimed. This rejection is traversed as factually erroneous.

As previously pointed out, the factual determination of lack of novelty under 35 U.S.C. §102 requires the identical disclosure in a single reference of each element of claimed invention such that the identically claimed invention is placed into the knowing possession of one having ordinary skill in the art. *Crown Operations International Ltd v. Solutia, Inc., supra; Helifix Ltd. v. Blok-Lok, Ltd. supra; Electro Medical Systems S.A. v. Cooper Life Sciences, Inc., supra*. Indeed, there is a fundamental and significant difference between the claimed invention and the optical transmission system disclosed by Akasaka et al. that scotches the factual determination that Akasaka et al. identically describe the claimed invention within the meaning of 35 U.S.C. §102.

As argued in the September 3, 2002 response, in accordance with the claimed invention, the wavelength of the pump light is within the amplification wavelength band of an EDFA. This feature is neither disclosed nor suggested by Akasaka et al. In short, the wavelength of the pump light employed by Akasaka et al. is not within the amplification waveband of an EDFA. For example, advertizing to column 14 of Akasaka et al., lines 18 through 20, the wavelength of 1435nm and 1465nm are employed. In column 19 of Akasaka et al., lines 49 through 54, the wavelengths of 1435nm, 1450nm and 1480nm are disclosed.

Applicants would again note that in the paragraph bridging pages 4 and 5 of the November 15, 2002 Office Action, the Examiner asserted that the wavelength of the pump light is not recited in claim 6. In response, claim 6 has been amended by providing the wavelength of the pump light, thereby clearly distinguishing over Akasaka et al.

The above argued difference between the claimed invention and the optical transmission system disclosed by Akasaka et al. undermines the factual determination that Akasaka et al. identically describe the claimed invention within the meaning of 35 U.S.C. §102. *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics Inc., supra.* *Kloster Speedsteel AB v. Crucible Inc., supra.* Applicants, therefore, submit that the imposed rejection of claim 6 under 35 U.S.C. §102 for lack of novelty as evidenced by Akasaka et al. is not factually viable and, hence, solicit withdrawal thereof.

Previously Submitted Information Disclosure Statement

Applicants would invite the Examiner's attention to EP 0911 926 A1, including claim 7 thereof, listed in the previously submitted Information Disclosure Statement.

Applicants acknowledge, with appreciation, the Examiner's allowance of claim 8. Applicants also acknowledge, with appreciation, the Examiner's indication that claims 2, 4, and 7 contain allowable subject matter. Claims 2, 4 and 7 have been placed in independent form. Based upon the arguments submitted *supra*, it should be apparent that the imposed rejections have been overcome and that all pending claims are in condition for immediate allowance. Favorable consideration is, therefore, respectfully solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT, WILL & EMERY



Arthur J. Steiner

Registration No. 26,106

600 13th Street, N.W.
Washington, DC 20005-3096
(202) 756-8000 AJS:ntb
Facsimile: (202) 756-8087
Date: February 11, 2003